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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,852	09/15/2003	Homer W. Fogle JR.	TRW(AP) 6308	2133

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EXAMINER

BROWN, DREW J

ART UNIT

PAPER NUMBER

3616

DATE MAILED: 11/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/662,852	Applicant(s) FOGLE ET AL.	
	Examiner Drew J. Brown	Art Unit 3616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/17/05 (response to restriction req.).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 12-19, 23 and 24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11, 22, 25 and 26 is/are rejected.
- 7) ☒ Claim(s) 20 and 21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>9/15/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Species IV (Figures 14-17) in the reply filed on 10/17/05 is acknowledged.
2. Claims 17-19 have been withdrawn from consideration by the examiner because they are drawn to figures 10-13.
3. Claims 12-19, 23, and 24 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 10/17/05.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-6, 8, 9, 11, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Takahashi (U.S. Pat. No. 3,449,996).

With respect to claims 1 and 26, Takahashi discloses an actuatable fastener comprising a body (16) including a head (body portion at thread 19) and a shank (17). The body includes an interior chamber (25) that is partially defined by a side wall

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extending from the head into the shank, and an end wall (part of bore near fracture zone) is positioned in the shank.

A member (33) is disposed in the chamber, and an initiator (column 3, lines 1-7) is actuatable to produce combustion products in the chamber that act on the member to move the member in a first direction in the chamber to strike the end wall, creating a fracture in the shank, which separated at least a portion of the shank from a remainder of the shank. The combustion products move the member beyond the fracture at least a predetermined distance to move the at least a portion of the shank at least the predetermined distance from the remainder of the shank (Figure 4).

With respect to claim 2, the shank includes a first shank portion (portion containing threads 21) opposite the head and a second shank portion (portion containing threads 22) between the first shank portion and the head, where the first shank portion is separated from the second shank portion when the shank is ruptured (Figure 4).

With respect to claim 3, the shank includes an annular groove (26) separating the first shank portion from the second shank portion, where the fracture occurs at the annular groove (Figure 4).

With respect to claim 4, the member has an interference fit with the side wall that forms a seal to block the combustion products from escaping the chamber (column 2, lines 59-62).

With respect to claim 5, the combustion products comprise at least one of solids and luminous ignition flashes (squib 36).

With respect to claim 6, the initiator is at least partially supported in the head (Figure 2).

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With respect to claim 8, the shank has a first portion connectable with a first part (53) and a second portion connectable with a second part (16), the first part being movable relative to the second part, where the first portion of the shank is separated from the second portion of the shank when the member causes the fracture in the shank. The member moves the first portion of the shank and the first part at least the predetermined distance from the second portion of the shank and the second part (Figure 4 and Figure 6).

With respect to claim 9, the first shank portion has an outer surface comprising first screw threads (21) and the second shank portion has an outer surface comprising second screw threads (22).

With respect to claim 11, the actuatable fastener further comprises a first fastener (53) that cooperates with the first screw threads (21) to fixedly connect the first shank portion to a first part (51 or 52), and a second fastener (20) that cooperates with the second screw threads (22) to fixedly connect the second shank portion to a second part (16), where the first and second parts thereby being releasably connected to each other.

6. Claim 25 is rejected under 35 U.S.C. 102(e) as being anticipated by Elqadah et al. (U.S. Pat. No. 6,746,044 B2).

Elqadah et al. discloses an inflatable vehicle occupant protection device for helping to protect a vehicle occupant, where the inflatable vehicle occupant protection device has a deflated condition and an inflated condition. An inflation fluid source (18) is actuatable to provide inflation fluid to inflate the protection device from the deflated condition to the inflated condition. A housing (16) helps to direct inflation fluid from the

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inflation fluid source toward the protection device upon actuation of the inflation fluid source.

A vent opening (32) is in the housing for venting inflation fluid from the housing, and a vent member is movable a predetermined distance from a closed position blocking venting of inflation fluid through the vent opening to an open position, enabling venting of inflation fluid through the vent opening.

An actuatable fastener has a shank with a first portion (122) connectable with the vent member (30) and a second portion (120) connectable with the housing (16) to hold the vent member in the closed position. The fastener is actuatable to fracture the shank and release the vent member for movement toward the open position, where the actuatable fastener comprises means for displacing the first portion the predetermined distance from the second portion to propel the vent member the predetermined distance from the closed position to the open position (Figure 1).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi. Takahashi discloses the claimed invention as discussed above but does not disclose that the body comprises a metal housing and a plastic portion molded onto the housing, where the metal housing forms a portion of the head, and the plastic portion forms the shank and a portion of the head.

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However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a metal housing for the body and also have a plastic portion molded onto the housing, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

9. Claim 10 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi in view of Wierzchon (U.S. Pat. No. 6,125,526).

Takahashi discloses the claimed invention as discussed above but does not disclose that one of the first and second screw threads comprise right hand threads and the other of the first and second screw threads comprise left hand threads.

However, Wierzchon does disclose a fastener that has both left and right hand screw threads (Figure 1). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Takahashi in view of the teachings of Wierzchon to one of the screw threads comprise right hand threads and the other left hand threads in order to obtain the desired connection characteristics.

Allowable Subject Matter

10. Claims 20 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Butterfield, Menichelli, and Smith disclose similar fasteners.

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Webber et al., Ryan, Marotzke, and Bowers et al. disclose similar inflatable vehicle occupant protection devices.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Drew J. Brown whose telephone number is 571-272-1362. The examiner can normally be reached on Monday-Thursday from 7 a.m. to 4 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul N. Dickson can be reached on 571-272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Drew J Brown
Examiner
Art Unit 3616

DJB



DAVID DUNN
PRIMARY EXAMINER